ORIGINAL

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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate the Implementation of Feed-in Tariffs.	))))))	DOCKET NO. 2008-0273

DIVISION OF CONSUMER ADVOCACY'S
COMMENTS ON THE PROPOSED WORKING GROUP PRELIMINARY PLAN

As proposed in the Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited ("MECO") (collectively referred to as the "HECO Companies"), February 26, 2010 letter to the Commission, the Division of Consumer Advocacy ("Consumer Advocate") hereby submits the following comments on the HECO Companies' proposed Reliability Standards Working Group ("Working Group").

I. BRIEF PROCEDURAL HISTORY.

In its Decision and Order filed September 25, 2009 in the instant proceeding ("Decision and Order"), the Commission directed the HECO Companies to:

> . . . develop reliability standards for each company, which should define most circumstances in which FIT [(Feed In Tariffs)] projects can or cannot

be incorporated on each island. The HECO Companies should incorporate the other parties to this docket into the process of crafting these standards. The standards should complement existing standards, including those in the HECO Companies' tariff Rule 14, and should provide greater predictability with respect to reliability issues for developers. While the commission prefers that the standards be filed prior to FIT rates taking effect, the commission will entertain proposals from the parties on an alternate means or timeline for completion of the standards within fourteen days of the date of this Decision and Order. The commission in particular wants the HECO Companies to adopt standards that establish when additional renewable energy can or cannot be added on an island or region therein without markedly increasing curtailment, either for existing or new renewable projects. FIT generation should meet new load requirements and displace fossil fuel generation. Accordingly, FIT projects should not meaningfully displace existing renewable energy generation. For instance, minimum load standards could demonstrate whether additional wind generation could be added to the HELCO and MECO grids without harming reliability or directly leading to more curtailment of existing renewable during off-peak hours.

Standards alone shall not be absolutely dispositive in determining whether to include or exclude projects from FIT eligibility. If a given standard indicates that a project is not viable in a location, the developer could still request, and pay for, additional studies to further assess the project's feasibility. In some instances, standards could indicate that projects are possible, but more comprehensive analyses such as an IRS could conclude that they are not feasible. In such cases, the HECO Companies could still deny the project, though they would need to file a detailed explanation for the rejection with the commission.

The standards should also be flexible, based on experience and changes in system conditions. The commission asks that the HECO Companies modify the standards for each company after each year of the FIT'S operation, or more frequently if appropriate, to reflect changes to transmission, distribution, generation, demand, generation mix, ancillary services availability, the results of ongoing studies, and any other relevant factors.[1]

On February 8, 2010, the HECO Companies filed its report on its "Proposed FIT Reliability Standards for the Hawaiian Electric Companies," which included as one of its recommendation the formation of the Working Group. In addition, on February 8, 2010,

[1] Decision and Order, pages 50 and 51.

proposed reliability standards were filed by: (1) Blue Planet Foundation ("Blue Planet"); and (2) Clean Energy Maui LLC ("Clean Energy Maui") and Zero Emissions Leasing LLC ("Zero Emissions").

On February 19, 2010, the Commission directed the HECO Companies among other things to further elaborate on their proposal to convene the Working Group.

On February 26, 2010, the HECO Companies responded to the Commission, which included their "Proposed Conceptual Framework for Reliability Standards Working Group" ("Working Group Framework").

II. COMMENTS.

The Consumer Advocate believes that the formation of the Working Group will be beneficial in that it will provide a means by which to evaluate the HECO Companies' electric systems from a reliability stand-point in a more transparent manner. As noted by the Commission:

> [It] recognizes the need of developers for transparency with respect to what the reliability and interconnection standards are that may preclude a project from being implemented under the FIT. At the same time, the commission acknowledges that simple metrics might not fully capture reliability considerations. It is concerned though, that without some transparency and predictability in reliability determinations, developers are unable to gauge the probability that their projects could be developed, which increases the developer's risk.[2]

In the instant proceeding, the various parties have different recommendations in which to "capture reliability considerations" and the level of "transparency and predictability in reliability determinations" that are necessary. The HECO Companies,

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[2] Decision and Order, page 50.

based on preliminary findings, appear to propose system limits by island and are proposing that additional review and studies be conducted by the Working Group to:

- Refine and evaluate the HECO Companies' preliminary findings.
- Commission studies by qualified technical entities to identify near-term, mid-term and long-term solutions for each island and work to implement those solutions as quickly as possible, to the extent that reliability and/or curtailment challenges of integrating more variable renewable, including FIT resources, on any of the island served by the HECO Companies are validated.
- Provide technical and policy solutions roadmap to the Commission to resolve the reliability and commercial business concerns.
- Provide technical Reliability Standards recommendations to the Commission.

Blue Planet Foundation appears to be recommending that formal bulk electric system reliability standards equivalent to the North American Electric Reliability Corporation ("NERC") reliability standards be adopted in Hawaii ("Hawaii NERC RS") and upon completion, such reliability standards would be administered by an independent entity, such as a Hawaii Independent System Operator ("HISO"). Blue Planet notes that until Hawaii NERC RS are adopted, the following six characteristics identified by NERC should be adopted as Hawaii Bulk Electric System Reliability Principles:

1. The system is controlled to stay within acceptable limits during normal operations.

2. The system performs acceptably after credible contingencies.

3. The system limits the impact and scope of instability and cascading outages when they occur.

4. The system's facilities are protected from unacceptable damage by operating them within facility ratings.

5. The system's integrity can be restored promptly if it is lost.

6. The system has the ability to supply the aggregate electric power and energy requirements of the electricity consumers at all times, taking into account scheduled and reasonably expected unscheduled outages of system components.[3]

Clean Energy Maui and Zero Emissions appear to propose: (1) Technical Requirements for Interconnection which they state, are essentially identical to the technical requirements for interconnection contained in HECO's Rule No. 14H; and (2) a Reliability Standard for Curtailment that expressly identifies "the amount of additional renewable energy that can be added on an island or regions in relation to the amount of non-renewable energy that can be curtailed to accommodate such additional renewable energy."[4]

Clean Energy Maui and Zero Emissions further states that:

> The amount of addition of renewable kWh accommodated by reduction or curtailment of non-renewable kWh will depend on the capacity factors and other generating characteristics of the renewable generation being added, the non-renewable generation being reduced or curtailed, and all the other existing renewable and non-renewable generation on the Company's system. The purpose of the second part of ZEL/CEM's proposed

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[3] "Blue Planet Foundation's Reliability Standards," filed February 8, 2010 and response to HECO/Blue Planet-IR-1.

[4] Clean Energy Maui and Zero Emissions comments filed on February 8, 2010, page 3.

> Reliability Standard is to determine the aggregate amount of renewable kWh that can be added to the grid through reduction or curtailment of non-renewable kWh, without compromising the reliability of the utility's electric system.[5]

Based on its review at this time, the Consumer Advocate notes that the recommendations by both Blue Planet and Clean Energy Maui and Zero Emissions would require additional review and evaluation. As it relates to Blue Planet's recommendations, such questions as to how the NERC guidelines and reliability standards may need to be revised to consider that NERC and other regional reliability organizations relate to generation and transmission facilities and not the distribution facilities.[6]

Blue Planet also recognizes that

> The Hawaii NERC RS process has not been undertaken or completed. Until this process is substantially completed, it is not possible to identify in detail modifications to NERC RS that may be necessary and appropriate for the HECO Companies' systems.[7]

As it relates to the Clean Energy Maui and Zero Emissions recommendation, it appears that they are seeking to base their standards on:

> . . . the amount by which deliveries of electricity from dispatchable or curtailable generating facilities to the utility's electricity system can be and are reducing or curtailed by the utility during a 24-hour load cycle. . .

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5 Response to HECO/ZELCEM IR-16.

6 The NERC Reliability Standards apply to the "bulk power system," which is defined as

> . . . facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.

Refer to the "Rules of Procedure of the North American Electric Reliability Corporation," effective March 21, 2008.

7 Response to HECO/Blue Planet-IR-2.

> . . . the amount of electricity from renewable generating facilities (in-line hydropower, photovoltaic, concentrating solar and onshore wind) that could be added or delivered to the utility electric system, without compromising the reliability of the utility electric system, by displacing, reducing or curtailing generation of electricity from existing non-renewable dispatchable generating facilities.[8]

The Consumer Advocate notes that the Clean Energy Maui and Zero Emissions' recommendations also will need to be reviewed to: (1) assess how the amount of curtailment of the HECO Companies' systems should be calculated as the load cycle over each 24-hour period may vary due to the seasons; (2) assess how the curtailment may impact system reliability; and (3) assess costs associated with such curtailment as HECO Companies currently dispatch their own generating units economically based on traditional regulatory principles of maintaining "reasonable" rates. The addition of renewable energy resources may necessitate the need to dispatch units uneconomically, for instance a less cost effective utility generating unit may need to be dispatched prior to a more efficient unit in order to provide quicker frequency response.

The Consumer Advocate believes that the establishment of the Working Group will hopefully result in a more transparent process that will: (1) provide an independent evaluation of the current state of the HECO Companies' electric system and determine the amounts of renewable energy that can be incorporated onto the HECO Companies' existing systems and the impacts, if any, to system reliability; and (2) provide an independent assessment and evaluation of the different reliability standards proposed above to determine a reasonable manner in which to proceed.

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[8] Pages 1 and 2 of the "Memorandum in Support of the Motion", "Motion of Zero Emissions Leasing LLC to Compel Hawaiian Electric Companies to Provide Responses to Information Request," filed March 8, 2010 in the instant proceeding.

Furthermore, the Consumer Advocate believes that such a Working Group may provide the necessary focus on addressing reliability issues that can be incorporated within other planning processes such as the Clean Energy Scenario Planning or Integrated Resource Planning processes in which reliability will be assessed with other issues such as fostering renewable energy resources and costs.

That being said, the Consumer Advocate notes that the HECO Companies have proposed a conceptual framework for the Working Group, which includes such details as the Working Group roles and objectives, the establishment of an Independent Facilitator, participants and operating structure, governance, the type of technical studies (e.g., distribution level evaluations, integrated system level evaluations), and funding. Although such concepts of establishing an overall Working Group, such as a Technical Group and an Independent Facilitator, appear reasonable, the Consumer Advocate believes that other elements need to be better identified and framed and that such details may be better left for discussion once the Working Group is established as there are various questions such as: 1) whether the scope of the technical studies as set forth by the HECO Companies will provide sufficient information to assess whether the reliability standards recommended by Blue Planet and Clean Energy Maui and Zero Emissions can be established in Hawaii; 2) what the costs associated with the Working Group will be; 3) from whom the costs should be borne by (e.g., HECO Companies, Public Utilities Commission fee); and 4) the composition (i.e., who should be in the Working Group) of the Working Group.

Thus, the Consumer Advocate does not oppose the idea of a Working Group to address certain concerns, such as transparency of any such effort, as there does not

seem to be any other viable means by which to address that concern. However, until answers to these questions have been addressed, the Consumer Advocate's endorsement of the concept is made with some reservations.

DATED: Honolulu, Hawaii, March 15, 2010.

Respectfully submitted,

By _____
DEAN NISHINA
Executive Director

DIVISION OF CONSUMER ADVOCACY

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S COMMENTS ON THE PROPOSED WORKING GROUP PRELIMINARY PLAN** was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

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